## **Head Slate:**

Slug: NASA's Landsat in HD 2008 Resource Tape

TRT: 27:50 GSFC Library # G2008-041HD

Super(s): NASA/USGS Release Date: 4/28/08

Center Contact: Andy Freeberg 301-286-0746

For more info:

http://www.nasa.gov/centers/goddard/multimedia/hd catalogue.html

**Synopsis:** The following is a series of HD visualizations generated using Landsat data. Landsat satellites have taken specialized digital photographs of Earth's continents and surrounding coastal regions for over three decades, enabling people to study many aspects of our planet and to evaluate the dynamic changes caused by both natural processes and human practices. Scheduled for launch in summer 2011, the Landsat Data Continuity Mission (LDCM) will extend the long-standing legacy of Landsat data.

Slug: NASA's Landsat in HD 2008 Resource Tape Clip Slate: Landsat Image Mosaic of Antarctica Flyover

**Description:** The Landsat Image Mosaic of Antarctica (LIMA) is a realistic, nearly cloudless satellite view of the continent at a resolution 10 times greater than ever before with images captured by the NASA-built Landsat 7. This animation flies around Ross Island and the Dry Valleys of Antarctica highlighting the beautiful data provided by LIMA. Both a version including landmark labels and without any labels is included.

TRT: 10:09

Super(s): NASA/USGS/NSF/BAS

Center Contact: Andy Freeberg 301-286-0746

http://svs.gsfc.nasa.gov/goto?3482

Slug: NASA's Landsat in HD 2008 Resource Tape Clip Slate: Chesapeake Bay Watershed Tour

**Description:** The watershed that drains into the Chesapeake Bay is a huge expanse that extends 64,000 miles into five states across North America (New York, Pensylvania, Maryland, Delaware, Virginia) and the District of Columbia. This Landsat visualization zooms in and flies all around the bay area, showing cities, rivers, landmarks, and an overlay of the full Chesapeake watershed. This sequence is an edited version of several longer visualizations, the full versions of which can be found on tape G08-034HD.

TRT: 7:42

Super(s): NASA/USGS

Center Contact: Andy Freeberg 301-286-0746

http://svs.gsfc.nasa.gov/goto?3472 http://svs.gsfc.nasa.gov/goto?3493

Slug: NASA's Landsat in HD 2008 Resource Tape Clip Slate: Rise of the Three Gorges Dam

**Description:** Some call it the eighth wonder of world; others say it's the next Great Wall of China. Upon completion in 2009, the Three Gorges Dam will be the world's largest hydroelectric power generator. One of the few man-made structures so enormous that it's actually visible to the naked eye from space, NASA's Landsat satellite has had a closer look, providing detailed, vivid views of the dam since its inception in 1994.

TRT: 2:16

Super(s): NASA/USGS

Center Contact: Andy Freeberg 301-286-0746

http://svs.gsfc.nasa.gov/goto?3433

Slug: NASA's Landsat in HD 2008 Resource Tape Clip Slate: Area Flyover of the Seasons in Salt Lake City, Utah

**Description:** Landsat 7 imagery is combined here with terrain elevation data to create a view of the Salt Lake City area. The identical images were taken in the fall and winter of 2001 and the visualizations can be compared to show seasonal changes.

TRT: 2:01

Super(s): NASA/USGS

Center Contact: Andy Freeberg 301-286-0746

http://svs.gsfc.nasa.gov/goto?2556 http://svs.gsfc.nasa.gov/goto?2557

Slug: NASA's Landsat in HD 2008 Resource Tape

Clip Slate: Mt Kilimanjaro's Melting Snow Cap, 1993 & 2000

**Description:** Some scientists believe the snow cap of Mount Kilimanjaro will be gone in two decades. Researchers say the ice fields on Africa's highest mountain shrank by 80 percent in the past century. The snow cap formed some 11,000 years ago. The Landsat satellite captured these images of Kilimanjaro February 17, 1993 and February 21, 2000.

TRT: :40

Super(s): NASA/USGS

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http://svs.gsfc.nasa.gov/goto?2700 http://svs.gsfc.nasa.gov/goto?2701 Slug: NASA's Landsat in HD 2008 Resource Tape

Clip Slate: Urban Growth in Las Vegas

**Description:** In May 1973, less than a year after the first of NASA's Landsat satellites was launched. Las Vegas, Nevada had a population of only 358,000. By 2006 the population had ballooned to over 2 million. Still one of America's fastest growing urban areas, this series of Landsat scenes from four different years shows just how dramatic the growth of Las Vegas has been.

TRT: :24

Super(s): NASA/USGS

Center Contact: Andy Freeberg 301-286-0746

http://svs.gsfc.nasa.gov/goto?10184

Slug: NASA's Landsat in HD 2008 Resource Tape

Clip Slate: South American Deforestation HD Visualization

**Description:** The following visualization shows changes in Rondonia, Brazil, due to deforestation. Landsat data from 1975, 1986, 1992, and 2001 is presented.

TRT: :19

Super(s): NASA/USGS

Center Contact: Andy Freeberg 301-286-0746

http://svs.gsfc.nasa.gov/goto?2116

Slug: NASA's Landsat in HD 2008 Resource Tape

Clip Slate: HD Great Zooms

**Description:** Using data from different spacecraft and some powerful computer technology, visualizers at the Goddard Space Flight Center present you with a collection of high definition "great zooms". Starting with our camera high above the Earth, we rush in towards the surface at what would be an impossible speed for any known vehicle. Passing though layers of atmosphere, the colors of our destinations shimmer with their own unique characteristics, and suddenly we find ourselves floating in virtual space just above the ground.

## ITEM 1: Great Zoom into Greenbelt, MD: NASA Goddard Space Flight Center

TRT: :15

http://svs.gsfc.nasa.gov/goto?2185

ITEM 2: Great Zoom into Chicago, IL: The Adler Planetarium

TRT: :15

http://svs.gsfc.nasa.gov/goto?3380

ITEM 3: Great Zoom into Los Angeles, CA: The Kodak Theater

TRT: :48

http://svs.gsfc.nasa.gov/goto?3117

ITEM 4: Great Zoom into the Grand Canyon, AZ

TRT: :15

http://svs.gsfc.nasa.gov/goto?2665 ITEM 5: Great Zoom into Don Juan Pond, Antarctica

TRT: :22

http://svs.gsfc.nasa.gov/goto?2874

Section TRT: 2:03 Super(s): NASA

Center Contact: Andy Freeberg 301-286-0746